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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,401	09/24/2001	Hisatomo Yonehara	011275	5630
23850	7590	05/18/2004	EXAMINER	
ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP 1725 K STREET, NW SUITE 1000 WASHINGTON, DC 20006			MARKHAM, WESLEY D	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

AS

<b>Office Action Summary</b>	<b>Application No.</b> 09/960,401	<b>Applicant(s)</b> YONEHARA, HISATOMO	
	<b>Examiner</b> Wesley D Markham	<b>Art Unit</b> 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-8 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/24/03</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. Acknowledgement is made of the amendment submitted by the applicant on 1/29/2004, in which the specification of the instant application was amended. Claims 1 – 8 are currently pending in U.S. Application Serial No. 09/960,401, and an Office Action on the merits follows.

***Priority***

2. Acknowledgement is made of the English-language translation of Japanese priority document JP 2000-294108, submitted by the applicant on 2/27/2004.

***Information Disclosure Statement***

3. The IDS filed by the applicant on 9/24/2003 is acknowledged, and the references listed thereon have been considered by the examiner as indicated on the attached copy of the PTO-1449 form.

***Specification***

4. The objections to the specification, set forth in paragraph 5 of the previous Office Action (i.e., the non-final Office Action mailed on 8/29/2003), are withdrawn in light of the applicant's amendment in which the specification was amended to correct a typographical error and to capitalize various trademarks.

***Terminal Disclaimer***

5. The terminal disclaimer filed on 1/29/2004 disclaiming the terminal portion of any patent granted on this application that would extend beyond the expiration date of USPN 6,524,757 (i.e., Koike et al.) has been reviewed and is accepted. The terminal disclaimer has been recorded. As such, the obviousness-type double patenting rejection of Claims 1 – 8 based on the claims of Koike et al., set forth in paragraphs 20 – 21 of the previous Office Action, is withdrawn.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
7. To begin, please note that the rejection of Claims 1 – 8 under 35 U.S.C. 103(a) as being obvious over the combination of Koike et al. (USPN 6,524,757 B2) and Sobue et al. (USPN 6,143,450), set forth in paragraphs 14 – 16 of the previous Office Action, is withdrawn in light of the applicant's statement that U.S. Patent Application Serial No. 09/960,401 (i.e., the instant application) and USPN 6,524,757 (i.e., the Koike et al. reference) were, at the time the invention of the instant application was made, both owned by Dainippon Ink and Chemicals, Inc. (see page 8 of the

response filed on 1/29/2004). This statement disqualifies Koike et al. as prior art under 35 U.S.C. 103 in the instant application.

8. Claims 1, 2, and 4 – 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marumoto et al. (USPN 6,277,529 B1) in view of Obayashi et al. (USPN 6,048,924) for the reasons set forth in paragraphs 7 – 9 of the previous Office Action.
9. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marumoto et al. (USPN 6,277,529 B1) in view of Obayashi et al. (USPN 6,048,924), and in further view of Larson et al. (USPN 5,055,113) for the reasons set forth in paragraphs 10 – 11 of the previous Office Action.
10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marumoto et al. (USPN 6,277,529 B1) in view of Obayashi et al. (USPN 6,048,924), in further view of either Hirayama et al. (USPN 5,821,277) or Satoh et al. (USPN 5,821,016), and in view of Kashiwazaki et al. (USPN 5,552,192) for the reasons set forth in paragraphs 12 – 13 of the previous Office Action.

### ***Response to Arguments***

11. Applicant's arguments filed on 1/29/2004 have been fully considered but they are not persuasive.

12. Regarding the 35 U.S.C. 103(a) rejections based on Marumoto and Obayashi (as well as various other secondary references in regards to the dependent claims), the applicant argues that the combination of Marumoto and Obayashi is unreasonable, unlikely, and improper. The applicant first summarizes the teachings of Marumoto and then summarizes the teachings of Obayashi. The applicant argues that one of ordinary skill in the art would not have been motivated to use the amino resin cross-linking agent of Obayashi in place of the resin in Marumoto because, in Obayashi, a water-borne resin is essential as a base resin to be crosslinked (i.e., with / by the amino resin) according to Obayashi. This argument is not convincing for the following reasons. To begin, it is not the examiner's position that it would have been obvious to one of ordinary skill in the art to utilize solely the amino resin (A) disclosed in Obayashi et al. as the only component of the resin in the color filter ink-jet printing process of Marumoto et al., as implied by the applicant. The resin that one of ordinary skill in the art would have been motivated to use in the process of Marumoto et al. is clearly the amino resin also containing the water-borne resin (B), as disclosed by Obayashi et al. This position was set forth by the examiner in the previous Office Action. For example, in the discussion of Claim 5 (see paragraph 9 of the previous Office Action), which requires that the colored composition further contain a compound having a photopolymerizable functional group, the examiner clearly sets forth that the resin of Obayashi et al. in question (i.e., to be used in the process of Marumoto et al.) is the water-borne resin composition as a whole (not merely the amino resin component of this resin). In this discussion, the examiner

explicitly points to portions of Obayashi et al. used in the rejection (i.e., Col.8, lines 23 – 32 and Col.9, lines 7 – 25) that relate to the water-borne component (B) of the resin. Additionally, the motivation cited by the examiner to use the resin of Obayashi et al. in the ink-jet printing / color filter manufacturing process of Marumoto et al. (see paragraph 8 of the previous Office Action), specifically that (1) since it is water based, the amount of organic solvent utilized and contained in the coating is reduced, (2) it has excellent curability, (3) it has excellent water resistance and heat resistance, and (4) it has a hardness equivalent to the hardness of solvent-borne amino resins, is clearly relevant only to the overall resin of Obayashi et al., not to solely the amino resin component (A) (see the Abstract of Obayashi et al., which states that the advantages cited by the examiner are obtained by using the water-borne resin comprising both the amino resin component (A) and water-borne resin component (B)). As such, the examiner maintains that it would have been obvious to one of ordinary skill in the art to utilize the resin of Obayashi et al. in the ink-jet printing / color filter manufacturing method of Marumoto et al. with the reasonable expectation of obtaining the benefits of reducing the amount of organic solvent utilized, thereby reducing the manufacturing and waste-disposal costs of the process, and forming color filter pixels that have excellent curability, excellent water and heat resistance, and a high hardness due to the properties of the resin of Obayashi et al.

13. The applicant also argues that Marumoto does not teach an amino resin having a carboxyl group and/or a phenolic hydroxyl group, and that Obayashi does not teach

the use of the amino resin in inks for ink jet printing nor in inks for color filters. In response to applicant's arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D Markham whose telephone number is (571) 272-1422. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



WDM

Wesley D Markham  
Examiner  
Art Unit 1762



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